

### REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Claim 1 has been amended. Claims 1-6 remain pending in this application.


Claims 1 and 2 stand rejected under 35 U.S.C. §102(e) as being anticipated by Yiannoulos. Applicant traverses the rejection for the following reasons.

Applicant submits that Yiannoulos fails to disclose or suggest many features of the claimed invention. In particular, Yiannoulos neither discloses nor suggests the selecting means of the claimed invention, which selects one of two analog reference voltages respectively corresponding to the two color pixels included in the column pixel array in response to a select control signal.

In order to provide an analog to digital converter that can reduce comparing steps between an analog image data and an analog reference voltage, the claimed invention includes a column pixel array having two color pixels selected among three color pixels for sensing each different color, a selecting means and a comparing means. According to the claimed invention, the selecting means selects one of two analog reference voltages. In contrast, the system controller 32 of Yiannoulos selects one among three analog image data of a pixel array.

Yiannoulos further fails to disclose or suggest the comparing

means for comparing the selected analog reference voltage and the analog image data to generate the digital image data corresponding to the color pixels. According to Yiannoulos, the output circuit 34 is directly connected to the ramp generator 120 and the analog image data, whereas, the comparator 603A of the present invention is connected to the analog reference voltage generating units 601B, 601C through a MUX 602A. Then, the comparator 603A compares the analog image data and the selected analog reference voltage outputted from the MUX 602A. Accordingly, it is believed that the comparing means of the claimed invention is clearly distinguished from the output circuit 34 of Yiannoulos.



For the reasons set forth above, Applicant submits that amended claim 1 and its dependent claim 2 are not anticipated by Yiannoulos under 35 U.S.C. §102(e).

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Yiannoulos. Claims 4-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yiannoulos in view of Xiao. Applicant traverses the rejections for the following reasons.

As set forth above, Yiannoulos neither discloses nor suggests all of the features of claim 1. Applicant submits that Xiao does not supply the above-noted deficiencies of Yiannoulos. Accordingly, claims 3-6, which are dependent on claim 1, are patentable over Yiannoulos in view of Xiao for the reasons

discussed above with respect to claim 1, as well as on their own merits.

All objections and rejections having been addressed, it is respectfully submitted that claims 1-6 are now in condition for allowance and a notice to that effect is earnestly solicited. If any issues remain to be resolved, the Examiner is cordially invited to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

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